MICROPOLIS DOING OK

Micropolis's second quarter 1985 report to shareholders shows an acceptable, though not exceptional, financial situation. The following is excerpted from the Quarterly Report.

"Net sales for the second quarter were $20.5 million, up 72% from $11.9 million for the second quarter in 1984, and a new quarterly record. For the first six months, sales were $36.7 million, up 41% from $25.9 million last year. Net income for the second quarter was $485,000, up from $88,000 in 1984. For the first six months, net income was $74,000, down from $1,089,000 in 1984. Earnings per share increased for the second quarter to $.05 from $.01 last year, but decreased for the first six months to $.01 from $.12 in 1984.

"Demand for the 1320s remains strong. A number of our OEM customers are finding success in their markets with desktop and deskside systems that capitalize on the 1320's 85-megabyte capacity, 28-millisecond access time, and exceptional reliability. Other customers are planning to introduce new products utilizing 1320s.

"We have just shown the new 1350 Series drives at the National Computer Conference and are making first evaluation shipments to customers. The 1350 Series extends the capacity of our 5 1/4-inch Winchester drives to 170 megabytes, utilizing the ESDI interface.

"In June, the Company obtained a $30 million bank credit line. Together with the $16 million in cash now on hand, this line adds strong financial backing for planned new growth.

"Our main objectives now are to increase production and reduce costs of the 1320 Series and to bring the 1350 Series effectively to market. We expect financial results to improve as those objectives are met.

"Signed - Stuart P. Mabon, President"

I assume that the termination of production of the 1100 series (the 5 1/4" floppies that we are most familiar with) will further brighten the financial picture. They are not price competitive. The 1200 and 1400 series (8" Winchesters) will probably also be closed out in the near future. If nothing else, closing these production lines will open up capacity for the 1300s, which, I hear, can still not be produced as fast as people want to buy them.

Though I am depressed with the close of an era, I wish Micropolis well. Their product line, though changing, continues to be among the top in technical excellance and durability. We can still take pride in owning a Micropolis.
....

GOING FROM MDOS TO CP/M

by Lynn Rudow

THE PROBLEM

Several weeks ago one of my customers decided they wanted to start using the 9-digit ZIP and wanted to know what it would cost to do this. They didn't realize that there were apporoximately 12 different programs that were written by Buzz six years ago, using Micropolis Basic. Most of these programs would have to be changed, and the record format restructured, to add the four digits. This was partly because we didn't have four spare characters left in the record, and partly because we wanted to make some efficiency changes.

Now, this list is over 9,000 records large, and I always have at least 10, and at the moment 13, different files to manipulate. With 13 single-sided floppies holding the data, you just can't easily maintain a list that requires output in both alphabetic name and ZIP order. I elected to maintain the data in alpha order. Each disk held the A-C, D-G, etc., people. Getting a total alpha listing required making corrections, additions, deletions, to each individual file, sorting each disk alphabetically, and then printing the ten disks in order.

Getting a ZIP-order output was something else. Sure, I could sort each disk by ZIP. But there were over 300 different ZIP codes. If I were to use that output for delivery, I'd have to potentially cut each of the 13 output sets of labels into 300 parts, and then manually merge them all back together. Too much work. Too messy a product for delivery, anyway.

Since the majority of these ZIPs were in the city, what we did was first search each of the ten files for the non-Huntsville ZIPs, and put them together on a separate disk. After each of the 10 files were searched, we'd merge the non-Huntsville into a single 11th file. Then we'd sort the 10 for Huntsville only, and the 11th for non-Huntsville. That still required cutting up the 10 Huntsville label printouts into 12 parts (35801-35812) and merging them together. The non-Huntsville was cut into 2 parts and placed on the front and back of the larger Huntsville set of labels. Still messy and a lot of work, but usable. Needless to say, one of the big drivers in this conversion was how to cut down on the "cut & paste" jobs. Thus it would take me at least 3 or 4 days to update these 10 or so files. So when the customer wanted to change things, it was no small task.

THE SOLUTION

I discussed this with Buzz and of course he felt we should put everything under CP/M, and run it on the hard disk. I liked the idea of the hard disk, but I didn't like CP/M. I have become pretty good at changing programs under Micropolis Basic, and was proud of not having to run to Buzz everytime someone wanted something a little different. We discussed the possibility of running under OSM but you can't use BASIC/Z under OSM, and the sort for OSM, I am told,

is enormously slow. I´m talking 4 hours to sort 7,000 files. Well, that was out right there. So, I gave in and said okay, CP/M it is.

Our first task was to get the data from MDOS to CP/M. This task was made easy by using Bob Zale´s TR-MDOS program, which is supplied on the Basic/z disk. Since TR-MDOS has very good prompts I was assigned this job. For example:

From CP/M, I first typed ´RZ TR-MDOS´

The first prompt asks which drive holds the MDOS file. The second prompt asks for the name of the file. You must know this since it does not display the directory for you. Just print, or write down, the directory listing gotten under MDOS before your start the translation under CP/M. The third prompt asks for the drive on which you wanted the CP/M file to be created, and the fourth prompt ask the name of the CP/M file. The fifth prompt said press ´Y´ when ready. Simple, huh?

And away it went. A MDOS file was transferred to CP/M in a few minutes. My job was finished in a matter of a couple of hours. All 9,000 records of data on 13 files, and an additional 12 programs.

If we had been doing a straight conversion, that is, didn´t want to change things around, the system would "almost" work right now. Data files are converted to 250-byte random access records, just like in MDOS. Program files need a little tweaking. There isn´t any ASSIGN directive in Basic/z, and PUT writes only to the disk, not to the console and printer, as in MDOS. Areas of console and printer PUTs need to be changed to PRINT statements, preceeded by CONSOLE or LPRINTER statements. The ASSIGNs need to be replaced by CONSOLE, LPRINTER, or ECHO statements. Basic/z marks each line that has a syntax error with an apostrophy, so they are easy to find, either manually or by computerized search.

But I didn´t want to make it that simple. The Micropolis programs had a two-record per physical format. The code that provided that structure always confused me. Besides, CP/M allows the full 256 bytes on the Micropolis physical sector, though logical records of 128 bytes are most efficiently handled. We needed to add 4 bytes to each record, and I wanted to change a few other things. Like I wanted to add a little more space to the second address, and I wanted to move some data to a different location, and I wanted some numeric code changed to alpha code. I was just trying to make it a challenge for Buzz.

So what was Buzz doing while I was slaving away? Well, he was suppose to be writing a program to reconstruct the data to my new specifications.

Buzz not only wrote that program, but has gotten them into what looks like one program. Actually, there are about 3, but the operator only sees one.

I currently have 3 disks to work with, using the double-sided floppy, or 2 files using the hard. We still can´t sort the entire file because we don´t have enough memory, but working with 2 files has speeded up my job consider-

ably. It still only takes a couple of minutes to sort either alpha or ZIP
order, and the number of trips I make up and down the stairs has gone from 100
or more to about 5. (I bet I gain weight now!)

And as of last week, I can already go in and change a program, resave it and
compile. It's a little harder than Micropolis Basic, but that's Buzz' fault.
He's writing programs using different terminology than I am used to. However,
I was once again confident that given a little time, I'd feel the same way
about Basic/Z as I do Micropolis Basic.

Oh, I've decided I'm not running under CP/M, I'm running under BASIC/Z.

What I had thought was going to take weeks has only taken a couple of days.
Admittedly, Buzz has spent more time than I, but you know how programmers are,
they can always find ways to make a program run better.

                        THE EDITOR'S POSTSCRIPT

The fact that we still have to make two sort runs isn't actually a memory
problem. A CP/M system doesn't necessarily have any more memory than an MDOS
system, though, in this case, memory did increse from 48K to 56K. Lynn's
Micropolis Basic program could sort abourt 1200 records in memory on her 48K
SOL. Maybe one could sort 2000 on a 56K Vector.

What I've done in Basic/z is split the input file into 4 parts, sort each part
and save a temporary result, and then merge the parts together. The intent is
to allow 9999 records to a file. Ten thousand records at 128 bytes per record
equals 1,280,000 bytes, or 1.3 Mbyte. That size file will fit on a 5 Mb hard
disk, and still allow space to write a restructered file.

I tested the sort as I merged Lynn's 13 original data disks into a single file.
The program will currently sort up to about 7,500 records, but not 9,000. The
fix is to divide the file into six parts (or something) instead of four. If we
wanted the program to run on a 48K system, it might take a division of 8 or 10.
This selection of the number of divisions is currently hard-coded. The really
neat way to go about solving the problem, which I'm not up to tackling at the
moment, would be to test the size of the memory and the size of the file and
automatically create as many sub-sorts as necessary.

Of course you can't save a 1.3 Mb file on a 600K floppy. Vector's STORE and
RESTORE programs will take care of that problem. They were created for moving
an oversize file to multiple floppies without having to worry about how to
break up the file. Soon Lynn will have one file, one sort. She'll really get
fat.

TR-MDOS is the big reason all of you MDOS users should consider Basic/z if
you're going to CP/M. It knows how to read an MDOS disk from CP/M, and trans-
lates both programs and data from the MDOS format to the CP/M format. It also
knows how to translate Micropolis Basic syntax to Basic/z syntax. Basic-z
syntax is, as we've said many times, a super-set of Micropolis Basic. TR-MDOS

will only transfer Micropolis Basic program and data files. It won't transfer LINEEDIT or executable files. System/z' Utilities-1 programs will do that transfer for you, however.

If you aren't an MDOS user, you can still translate you MBASIC/BASIC-80 files to Basic/z. Just save them with the 'comma A' (ASCII) option, and rename them with an ASC suffix, instead of BAS. When Basic/z loads an ASC file into its buffer, it tries to make sense of everything. If it can't, Basic/z puts the apostrophy in column one. You'll have more editing to do when converting MBASIC programs than with a Micropolis Basic, mainly because Basic/z does disk file handling differently than MBASIC. I guess C-BASIC files are already in an ASCII format, so they can be loaded directly into Basic/z. I have zero experience with C-BASIC.

....

EIGHT-INCH AND HARD DRIVE MODIFICATIONS

by Buzz Rudow

Continuing my response to Albert Balk's letter in last month's newsletter, here's a little more information about how to enhance a Vector or Micropolis based computer.

The following two products are available from Hawkeye Grafix, 23914 Mobile St., Canoga Park CA 91307. Phone (818) 716-5220 or (818) 348-7909. Will Pierce is probably the only person at Hawkeye Grafix that would be able to discuss these products. Since he is the owner, he's hard to get hold of.

BIOS-PAC 1 - BASIC INPUT/OUTPUT SYSTEM DRIVERS FOR CP/M 2.2
MICROPOLIS 5-INCH CONTROLLER
($249 includes source code and requires MOVCPM.COM)

BIOS-PAC 1 is written in Z80 assembly language. The package includes the ultra fast Hawkeye Grafix Z80 assembler. The disk drivers are written for the Micropolis 5-inch controller and a choice of 8-inch disk controllers. When this system is installed, both 5-inch and 8-inch disks can be accessed, where drive A and B are 5 inch, and C and D are 8 inch. The 8-inch disk controllers supported are Tarbell SD or DD, CCS (California Computer Systems), or Advanced Digital single board computer.

The keyboard and video drivers are included for the Vector Graphic Flashwriter. Two drivers are included for printers, one for a standard serial port and one for an EPSON attached to a parallel port.

The package includes SYSGEN, FORMAT, and DISKCOPY for the Micropolis disks, and the ZCPR public domain improvement of CP/M. A submit file is included for easy installation in a 48K or 56K Z80 micro computer system. You must be familiar with Z80 assembly language to change the disk, keyboard, video, or printer drivers. If you have Micropolis drives, such as found in Vector Graphic System B, or even an Exidy Sorcerer, step up to 8 inch.

BIOS-PAC 2 - BASIC INPUT/OUTPUT SYSTEM DRIVERS FOR CP/M 2.2
VECTOR GRAPHIC HD/FD CONTROLLER
($249 includes Source code and requires MOVCPM.COM)

BIOS-PAC 2 is written in Z80 assembly language and includes the ultra fast Hawkeye Grafix Z80 assembler. This package provedes HARD DISK capability for users of the Vector Graphic HD/FD controller card, and the TANDON 503 (20 megabyte unformatted).

Like the BIOS-PAC 1, it supports multi-controller capability; Micropolis 5-inch, Northstar 5-inch, Tarbell 8-inch SD or DD, CCS 8-inch, and Advanced Digital 8-inch. The drivers for the keyboard, video, and printers are included in a 2K EPROM along with a complete monitor command system. You must specify the EPROM origin at either F800 or E800 hex. The monitor is provided in source code so that the appropriate drivers can be added or modified to suit your needs.

The package includes ECC logic (error correcting) for the HARD DISK and you can connect a Micropolis 5-inch disk to the same controller. Drive A and B are HARD DISK and drive C is the 5-inch (16 hard sector 300K SS DD), while D and E are 8-inch. The package includes utilities for startup, formatting, and system generation. The monitor allows booting from any one of six HARD DISK heads, in addition to 11 other DDT-like commands.

ZCPR, the public domain modification to CP/M, is included for your convenience in operation of the HARD DISK user areas in addition to the Hawkeye Grafix "D" disk directory utility. You must be familiar with Z80 assembly language to modify the EPROM which contains the keyboard, video, and printer drivers. You must specify which disk controller configurations are required when ordering.

....

LETTERS

Buzz: Al Brandli and Associates has been an authorized Vector Graphic dealer for four years. We are interested in how we can work together to achieve common goals. We put out a newsletter every other month. The July issue is enclosed, and we have put you on our mailing list. You have permission to reprint any article in your newsletter. We will also offer your members a 10% discount on any purchases made through our company.

We have sold hardware and software out of state, as well as made upgrades to systems in remote locations. We help you get your equipment to and from our location, or send our technician to your business location, or give you instruction on how to perform the needed labor yourself.

Al Brandli, Al Brandli and Associates, 3176 Pullman St., Suite 103, Costa Mesa CA 92626. Phone (714) 754-6363.

Al's newletter indicates that AL Brandli and Associates does about everything you'd want a dealer to do. He handles Vector and IBM as new computers, sells

Al Brandli and Associates   **(714) 754-6363**

INVENTORY CLEARANCE SALE
Good Through August 15, 1985

COMPUTERS

NEW Vector 4/20 Computer – 2 630K V3 and MZ compatible hard sector drives, 128K RAM and CP/M-86. MD-DOS optional. Retails for $4,495. **Sale price $3,395.**

NEW Vector 4-S/20 Computer – 2 720K IBM compatible soft sector drives, 128K RAM and CP/M-86. MS-DOS optional. Retails for $3,995. **Sale price $3,395.**

NEW Vector 4/30 Computer – 1 630K V3 and MZ compatible hard sector drive, 5Mb hard disk, 128K RAM and CP/M-86. Retails for $5,495. **Sale price $3,995.**

NEW Vector 4-S/30 Computer – 1 720K IBM compatible soft sector drive, 5Mb hard disk, 128K RAM and CP/M-86. Retails for $4,995. **Sale price $3,995.**

USED Vector 4/40 Computer – 1 630K V3 and MZ compatible hard sector drive, 10Mb hard disk, 128K RAM and CP/M-86. Retails for $6,495. **Sale price $3,495.**

USED Vector System B or MZ Computer – with 64K and 300K disk drives. Originally was $6,495. **Sale price $1,495.**

USED Vector 2600 Computer – with 64K and 2 630K hard sector drives. Retail was $3,995. **Sale price $1,995.**

USED Vector 3005 Computer – with 64K, one floppy and a 5 Mb hard disk. Retail was $5,995. **Sale price $2,495.**

USED Vector 5005 Computer – with 128K, one floppy and a 5 Mb hard disk. Can accommodate up to four add-on terminals. See below. Retail was $6,250. **Sale price $2,995.**

USED Vector 5010 Computer – with 128K, one floppy and a 10 Mb hard disk. Can accommodate up to four add-on terminals. See below. Retail was $6,750. **Sale price $3,295.**

USED Vector 5005 or 5010 Add-on Terminals – for above two computers. Includes 64K RAM. Retail was $1,685. **Sale price $995.**

PRINTERS

NEW Vector 3500 Letter Quality Printer – 33 CPS, compatible with all Vectors, bi-directional tractor & 10' cable. Retails for $2,300. **Sale price $1,395.**

USED Sprint 5 Letter Quality Printer – 45+ CPS, interfaces with any Vector Computer. **Sale price $1,195.**

NEW Okidata 193S Dot Matrix Printer – 160 CPS draft, 40 CPS correspondence quality, serial interface. Retail was $778. **Sale price $678.**

USED Diablo 1620 Letter Quality Printer with Tractor – 45 CPS, interfaces with any Vector Computer. Did retail for $3,500. **Sale price $1,495.**

USED Vector M-200 High Speed Dot Matrix Printer – 340 CPS, compressed print & cable. Retails for $3,450. **Sale price $1,695.**

MODEMS

NEW Racal Vadic VA212LC 1200/300 Baud Modem – Bell 212A/103 direct connect. Retail was $700. **Sale price $495.**

NEW Novation D-CAT Direct Connect Modem – 300 baud & auto answer. Retails for $199. **Sale price $140.**

USED Novation D-CAT Direct Connect Modem – 300 baud & auto answer. Retails for $199. **Sale price $100.**

SOFTWARE

DateMaster – calendaring and appointment software for the Vector 4. Retails for $295. **Sale price $149.**

CP+ Master Programs – a front end for CP/M. Translates CP/M commands into simple English. Excellent for first time user. Retails for $150. ea. **Sale price $40.**

SOFTWARE - Continued

DataManagr - data base management software. Retails for $495. **Sale price $300.**

dBASE II - data base management software. Retails for $495. **Sale price $395.**

Peachtree Order Entry System - for integration of Peachtree Accounts Receivable and Inventory, allows sales order tracking and backorder reporting. Retails for $1,200. **Sale price $500.**

Peachtree Accounts Receivable, Accounts Payable, General Ledger, Payroll and Inventory Control Modules - Retail for $595. per module. **Sale price $295.**

Memorite III - word processing software. Retails for $450. **Sale price $295.**

ExecuPlan II - electronic spreadsheet. Retails for $195. **Sale price $95.**

Forecasting ExecuModeler - a program for forecasting sales, cash flow, revenues, etc. Supplements ExecuPlan II. Retails for $295. **Sale price $99.**

Accuchart - business chart plotting on Vector 7700 printers and other letter quality and dot matrix printers. Retails for $295. **Sale price $195.**

V4 CP/M-86 Programmer's Kit - includes Vector 4 CP/M-86 programming manual and disk. Retails for $150. **Sale price $75.**

BASIC User's Guide - this reference guide is for the BASIC that comes with Memorite III Mail List and most Vector computers. Retails for $60. **Sale price $20.**

EXPANSION HARDWARE

Hard Disk Upgrades - add a 5 or 10 megabyte hard drive to your dual floppy computer (2600, 4/20, etc.). Replace the drive in your 5 megabyte computer (3005, 5005, 4/30, etc.) with a 10 megabyte drive. See separate insert sheet enclosed with this newsletter entitled "Economical Hard Disk Upgrade Specials".

USED 5005 or 5032 Add-on Terminal - includes 64K RAM. Retails for $1,685. **Sale price $995.**

Soroc CRT - for use with your Vector computer at home or at another remote location. Retail was $750. **Sale price $250.**

Vector 3 Extended CP/M Upgrade - convert your Vector 3 to a 128K system. Retails for $650. **Sale price $300.**

USED Hard Sector Floppy Drive - upgrade your single floppy Vector 3 (VIP or 1600) to a dual drive 2600. Reduces floppy backup hassle and adds utility and capacity to, e.g., Memorite III. Retails for $1,200. **Sale price $495.**

USED Dual Drive Unit - upgrade your System B or MZ to 4 drives. Retails for $650. **Sale price $375.**

NEW Oxford Copy Holders - Retails for $40. **Sale price $25.**

Turntable - position your computer for comfort for yourself or turn around to that other user. Retails for $45. **Sale price $30.**

SUPPLIES

NEC Multi-strike Ribbons - $1 off our already low price of $6. each when you buy two dozen or more.

Double-sided Vector Diskettes - $10 off our already low price of $60./box of 10 when you buy two boxes or more. These diskettes come with plastic library case.

Single-sided Diskettes - for MZ, System B and some Vector 3 computers. Box of ten. $10 off our regular price of $40. **Sale price $30.**

Continuous Form Feed Paper - 8 1/2" x 11". 15# or 18#. $10 off our regular price of $40. **Sale price $30.**

QUANTITIES ARE LIMITED SO INQUIRE NOW! Call Al at (714) 754-6363.

Al Brandli and Associates   (714) 754-6363

ECONOMICAL HARD DISK UPGRADE SPECIALS

A hard disk with all its advantages has now become more affordable for Vector owners.

Why have a hard disk? For the answer to this question please see "Hard Drive Versus Floppy Drive?" article in the July newsletter.

Ask Al for a quotation if your Vector computer is not listed below or if you wish to upgrade to an even larger hard disk; e.g., 28, 36 or 112 megabytes.

ABA Special Price	ABA Regular Price	Vector Regular Price	
From Vector Computer			To Vector Computer
From Vector 3 (Model 2600 dual floppy)			
$1,200.	$1,500.	$3,995.	To 5Mb hard drive (Model 3005 equivalent)
$2,000.	$2,500.		To 10Mb hard drive (Model 3010 equivalent)*
From Vector 3 (Model 3005 single floppy with hard drive)			
$1,600.	$2,000.		To 10Mb 3005 single floppy with hard drive*
From Vector 5 (Model 5005 single floppy with hard drive)			
$1,600.	$2,000.		To 10Mb 5005 single floppy with hard drive*
From Vector 3 (Model 1600 or VIP single floppy)			
$1,500.	$1,900.	$3,995.	To 5Mb hard drive (Model 3005 equivalent)
$2,300.	$2,900.		To 10Mb hard drive (Model 3010 equivalent)*
From Vector 4 (Model 4/20, 4-S/20 or VSX-2000 with two floppy drives)			
$1,200.	$1,500.	$2,750.	To 5Mb hard drive 4/30, 4-S/30 or VSX-2500
$1,600.	$2,000.		To 10Mb hard drive 4/40, 4-S/40 or VSX-3000
From Vector 4 (Model 4/30, 4-S/30 or VSX-2500 single floppy with 5Mb hard drive)			
$1,600.	$2,000.		To 10Mb hard drive 4/40, 4-S/40 or VSX-3000

*Includes required memory upgrade from 64K to 128K RAM. Subtract $300.00 if system already has 128K RAM.

TERMS:

. No deposit required.
. 90 day on-site warranty.
. Installation usually done on-site at your facility.
. Ask Al about ABA satisfaction, money-back guarantee.
. Prices reflect a trade-in value for your old drive.
. **Special prices good through July 31, 1985.**

supplies, used computers and peripherals, does repairs, and provides services such as custom programming, diskette conversion, and software searches. Wish I lives in Costa Mesa. Never-the-less, thanks to Al for making his existance known.

The last three pages were sales information from Al Brandli and Associates. Al has stated that Inventory Clearance closure date will be extended through September 15 for MUG members. He didn't mention an extention on the Hard Disk Upgrades, but it's worth a try to ask for the special price.

....

Lynn: We are a Vector dealer in Delaware. We would be very happy to provide the members of your group with any parts for their machines that we can. We also will download or upload any Vector format to any other Vector format. This covers the MZ to the new VSX/VMX series.

MEMORITE III

I would also like to market our VECTOR MEMORITE III Help Reference Screens product through your publication. The product consists of all the Help Screens for MEMORITE III as a printed booklet, or it is available on disk, for $15.00 plus $2.00 shipping & handling. We can supply any Vector format from single-sided, hard-sector to 8" ds/dd. Please specify what version of MEMORITE III your are using, and what disk format is desired. Disks are not suppled with the printed format version.

The product makes an excellent supplement to the manual. You experienced folks may also find several sub-commands not mentioned in the manuals and that may just help you become a little more proficient at using the program. Because the help screens are available on disk, you may edit them as necessary to make them fit into your office or business situation. The printout is 25 pages in length.

FUJITSU SP320 LQP

We have been looking for quite some time now for an inexpensive letter quality printer to go with the Vector Graphic Computer line and MEMORITE III. We finally have found this printer in the Fujitsu SP320. This is a 48 CPS daisy wheel printer which comes with serial and parallel interface.

When set up as serial with the Vector system, it perfectly emulates a Diablo 630 printer. This just happens to be one of the printer choices to which MEMORITE III interfaces perfectly. Cabling is an easily assembled RS-232 format.

No changes are necessary to the standard serial driver on the V4/V4S or VSX systems. It works beautifully on the older Vector 3 and 5 series as well. Some of its better features are as follows:

1. A sheet load switch which loads each sheet of paper to top of form for you. An optional cut sheet feeder for heavy duty work.
2. All switches are on the front or under the cover on the front for easy access.
3. It uses standard 96 character daisy-wheels.
4. In operation it is very quiet because of its cabinet and advanced print mechanism.
5. It includes a small buffer which allows better throughput time.
6. The most important of all is that it performs all of MEMORITE III's most advanced features such as sub and super-scripts, variable character spacing, underline, extra-strike, two-column printing, bold-face, over-strike, indents, and footnotes, all for less then $1600 retail.

R. Scott Martin, P. C. Supplies, Inc., 629 Belgian Dr., Bear DE 19701. Phone (302) 834-7272.

. . . .

Editor's Note: Readers might also want to talk to The Printer Works, 1961 Alpine Way, Hayward CA 94545. Phone (415) 887-6116. I recently bought a Diablo 630 from them at a resonable price.

. . . .

Lynn/Buzz: We're still plugging along with our VG 2600s and hoping for the best out there in Thousand Oaks. Has anyone heard of "Blast," the communications software that supposedly lets Vector Graphic computers share data "fast and efficiently" with any other computer? It's marketed by Midwest Data Source, Inc., in Cincinnati, Ohio, and sells for about $250 per package.

Tom Brown, Cranbury Publications, P.O. Box 157, Cranbury NJ 08512. Phone (609) 655-1445.

Tom - I've heard of it, but not for a 2600-type CP/M machine. I think it just lives in the 16-bit world of microcomputers, and on minis. Blast was developed by some university - Cornell? Reviews are good, but I don't know many specifics. Most any program will transfer from one computer to any other computer, if you have the same package on both computers. As far as I know, MODEM7 transfers from your Vector to any other computer, as long as the other computer is running the MODEM7, XMODEM, or Christenson protocol. CP/M users seem to use Crosstalk and Mite (and Vector's CONECT) most often when they go to a commercial communications program. I use MODEM7 (Library disk 1907) and do all I want to do, but then I don't do much. I've never implemented the auto-call and auto-answer. I use it for direct type-in calling, and for hard-wire transfers between computers. It looks, however, like MODEM7 will do all the good things one would like a communications program to do. Why does anyone get the commercial product? Perhaps the readers will send their experience along to us.

. . . .

CLASSIFIED

FOR SALE: System B, two Micropolis drives, software, manuals.

Dick Gerlach, (213) 377-6495.

. . . .

WANTED: Vector 3 Single or multiuser computer. Running or not. Am also
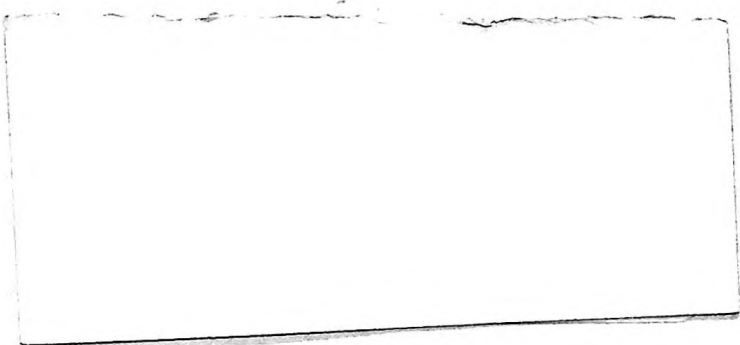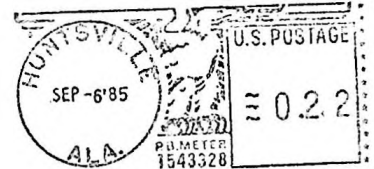interested in spare parts. If you have one or know where I can buy one, please
call me collect.

Dickson Small, 8731 Glen Nevis NE, Ada MI 49301. Phone (616) 676-9337.

. . . .

```
****************************************************************************
*           MICROPOLIS/VECTOR GRAPHIC USERS GROUP NEWSLETTER              *
* Published Monthly by DAMAN, 604 Springwood Circle, Huntsville AL 35803-1740 *
* Subscription rates: North America; $18/year  Elsewhere; $25/year, Airmailed *
*                                                                         *
* For Assistance with general information, MUG/Vector Graphic, DAMAN hardware *
* & software, Micropolis Basic, Basic/z, Micropolis drives & Micropolis parts-*
*                                                                         *
* Call Lynn at (205)881-1697 during the Central Times of 9 AM to 5 PM.  Buzz  *
* is sometimes around in the evening (Lynn will know) and from 9 - 12 on Sat. *
****************************************************************************
```

===

MICROPOLIS/VECTOR GRAPHIC
         USERS GROUP
    A Division of DAMAN
    604 Springwood Circle
Huntsville AL 35803-1740
       (205) 881-1697

FIRST CLASS MAIL
=================

FIRST CLASS MAIL
=================